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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/666,517      | 09/19/2003  | Michael D. Morris    | 01081CON            | 9174             |

7590

06/14/2005

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| EXAMINER |
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JACKSON, MONIQUE R

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| ART UNIT | PAPER NUMBER |
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1773

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/666,517

Applicant(s)

MORRIS ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/03 & 4/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 18-24, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Wexler (USPN 6,723,397.) Wexler teaches an ink jet recording element comprising a support having thereon in order: a) at least one porous, ink-retaining layer, and b) a fusible, porous ink-transporting layer of fusible, polymeric particles and a film-forming, hydrophobic binder (Abstract.) Wexler teaches that the support may be opaque, translucent or transparent and is preferably paper (Col. 4, lines 27-37.) Wexler teaches that the ink-retaining layer is formed from an aqueous dispersion coating comprising inorganic particles and from about 0% to about 80% polymeric binder such as those instantly claimed (Col. 3, lines 40-57) wherein the preferred layer is formed of fumed alumina and crosslinked poly(vinyl alcohol) binder wherein the crosslinking agent added to the dispersion may be zirconium sulfate (Col. 3, line 36-Col. 4, line 3.) Wexler also teaches that the ink jet recording element helps to overcome ozone-mediated degradation of an ink jet image provided on the element (Col. 1, lines 42-53 and Col. 2, lines 1-11.)
3. Claims 1, 6-13, and 18-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma et al (US 2004/0001926A1.) Sharma et al teach an ink jet recording element comprising a support having thereon an image-receiving layer containing finely divided particulate material

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and a metal(oxy)hydroxide complex wherein the resulting ink jet recording element, when printed with dye-based inks, provides superior optical densities, good image quality and has an excellent dry time and image stability, such as when exposed to an atmosphere comprising ozone (Abstract; Paragraphs 0018, 0027, 0121.) Sharma et al teach that the image-receiving layer is formed from an aqueous dispersion coated onto the support, preferably a paper support, wherein the dispersion comprises the particulate material, preferably a water-insoluble inorganic solid like fumed alumina; the metal(oxy)hydroxide complex, preferably a zirconium compound including those as instantly claimed such as zirconium hydroxychloride; and a polymeric binder, preferably poly(vinyl alcohol) (Paragraphs 0030, 0035, 0038, 0040; Examples.) Sharma et al further teach that the inorganic particles useful in the invention can be of any size but preferably have a mean particle diameter of less than about 1 micron (Paragraph 0037.) Sharma et al further teach specific examples that read upon the instantly claimed aqueous dispersions including ratios, binder weight percent and pH values within the instantly claimed ranges (Example 1, I-7 to I-12; Example 2.)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sharma et al. The teachings of Sharma et al are discussed above. Sharma et al do not

specifically teach the aggregate particle size and BET surface area of the fumed alumina as

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instantly claimed however, considering particle size and BET surface area are result-effective variables affecting the transparency and imaging properties of the coating layer, one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation to determine the optimum average particle size and BET surface area of the fumed alumina to provided the desired properties for a particular end use.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson  
Primary Examiner  
Technology Center 1700  
June 12, 2005